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Curriculum and Facilities Survey

For Academic Year 1989-90

by

Susan M. Meyer, Ph.D.
and
Michael S. Sherman, Ph.D.

Data Tabulated by

ASSOCIATION RESEARCH, INC.
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AACP CURRICULUM AND FACILITIES SURVEY FOR ACADEMIC YEAR 1989-90

INTRODUCTION

The 1989-90 AACP Curriculum and Facilities Survey provides an opportunity to compare the areas of program and plant for the schools of pharmacy in the United States.

A total of 73 of the 74 schools of pharmacy in the United States and Puerto Rico responded to the survey in spring, 1990. The survey covers the use of non-salaried (volunteer) faculty, hours required for practice experience in clerkships and externships, hours of general education courses required as a part of the professional degree program, changes in facilities over the previous year, and the number of clinical instruction sites of various types used during the 1989-90 academic year.

The statistical analysis summarizes most responses with highs, lows, averages, and medians, according to the number of schools responding to each item. An exception is facilities-related information where raw data and percentages are presented for each type of facility and category. Averages are recorded to the nearest whole hour, person, or site.

ANALYSIS

Volunteer Faculty

Sixty-eight schools reported using non-salaried (volunteer) faculty during the 1989-90 academic year. Among these schools, the number of such non-salaried (volunteer) faculty ranged from 3 to 350, with an average per school of 126. No indication of the role of these faculty (i.e., didactic instruction, experiential education) was made and may account for the disparity in the numbers among schools. Some schools consider externship preceptors formally as volunteer faculty; others do not.

Experiential Education [see Tables 1 through 4]

B.S. in Pharmacy

Sixty-four (64) schools reported having offered experiential education as part of a B.S. in pharmacy curriculum in 1989-90. (This number represents 60 of the 61 schools who currently admit students into a B.S. in pharmacy program and four schools in the process of converting to an all Pharm.D. curriculum.) Total hours of experiential education were reported as clerkship hours, externship hours, and selective hours (student selected experience type from clerkship or externship). The total number of

hours of experiential education offered by these 64 schools ranged from 320 to 1500 hours (average, 692 hours; median, 640 hours). Sixty-two schools indicated that a portion of the experiential component of each of their curricula was structured as clerkship. Clerkship hours ranged from 100 to 750 hours among these 62 schools (average, 256 hours; median, 220 hours). These same 62 schools also listed externship hours required, ranging from 120 to 800 hours (average, 407 hours; median, 388 hours). Fifteen of these schools listed hours in the selective category, ranging from 72 to 200 hours. Two additional schools indicated that all experiential hours in their B.S. in pharmacy program in 1989-90 were selected by the student from externship and/or clerkship.

Entry-Level Doctor of Pharmacy (Pharm.D.1)

Thirty-three (33) schools reported having offered experiential education as part of an entry-level Doctor of Pharmacy (Pharm.D.1) degree program in 1989-90. This number is less than the 38 schools which currently offer the Doctor of Pharmacy as the first professional degree as some programs are new and students have not yet progressed to the experiential component of those programs. Among these 33 schools, the total number of hours of experiential education (externship, clerkship, selective) ranged from 1120 to 2760 hours (average, 1863; median 1880). Thirty-two (32) schools indicated a clerkship requirement; 31 of these schools also had an externship requirement, and 13 also allowed students to select a portion of their experiential hours from externship or clerkship. One school listed all required experiential hours in the entry-level Doctor of Pharmacy program as selective. Specific data for each of the components (externship, clerkship, selective) are listed in Tables 2 and 4.

Post-B.S. Doctor of Pharmacy (Pharm.D.2)

Forty (40) schools reported a requirement of 1120 to 2990 hours of experiential education for successful completion of a post-B.S. Doctor of Pharmacy degree program (average, 1761; median, 1760). For the majority of these programs (28 of 40), experiential education consists only of clerkship. Seven additional programs include selective hours, two programs include externship hours, and three programs include all three types in the experiential education component of the post-B.S. Doctor of Pharmacy degree program. These data are presented in Table 3.

General Education

The number of hours of general education courses required (i.e., English and other courses in the behavioral, social, and humanities disciplines) averaged 29 hours for the 53 of the 73 reporting schools which are on a semester-hour basis, and ranged from 15 to 68 hours (see Table 5). The 18 reporting schools on a quarter-hour basis averaged 39 hours of general education requirements, with a range of 4 to 90 hours. A trimester or triquarter plan was reported by only 2 schools again this year; therefore, range and average data are omitted.

Physical Facilities [Table 6]

Table 6 presents the numbers of schools experiencing changes between the 1988-89 and 1989-90 academic years in the availability of various types of physical facilities. The majority of the reporting schools experienced no change in the availability of classroom facilities (86.3 percent) or teaching laboratories (82.2 percent). However, 11 percent of the reporting schools had an increase in classroom facilities and 2.7 percent experienced a decrease. Just less than 10 percent of the schools had an increase in teaching laboratory facilities and 8.2 percent experienced a decrease in the availability of these facilities. More schools had an increase in research laboratory facilities than any other type of facility; 28.8 percent of the reporting schools reported an increase and no schools experienced a decrease in research laboratory facilities. Another area where no decreases were experienced was administrative facilities, and 13.7 percent of the schools had an increase in these facilities. Most schools (84.7 percent) experienced no change in their instructional support facilities; however, 12.5 percent of the schools had an increase and 2.8 percent had a decrease in these facilities.

Clinical Facilities

The number of community pharmacies used as clinical instruction sites during the year averaged 51 for the 70 schools reporting using such sites and ranged from a low of 2 to a high of 240 (see Table 7). Hospitals or similar institutions were used by all of the 73 reporting schools and averaged 28 (range, 4 to 78). Finally, 56 schools reported the use of other sites for clinical instruction, but the types of sites were not identified.

TABLE 1. HOURS OF PRACTICE EXPERIENCE REQUIRED BY SCHOOL
BACCALAUREATE DEGREE

CODE	SCHOOL	CL	EX	SEL	TOTAL
1	Auburn	400	400		800
4	Arkansas	320	240	80	640
6	Pacific	160	660		820
8	Colorado	160	320	160	640
9	Connecticut	225	315		540
10	Howard	400	600	200	1200
11	Florida A & M	750	750		1500
12	Southeastern	640	640		1280
13	Florida			400	400
15	Georgia	160	320		480
16	Idaho State	160	160		320
18	Butler	160	480		640
19	Purdue	120	480		600
20	Drake	360	360		720
21	Iowa	320	320		640
22	Kansas	240	480		720
23	Kentucky	240	320		560
24	NE Louisiana	160	400		560
25	Xavier	150	150	150	450
26	Maryland	200	800		1000
27	Massachusetts	320	400		720
28	Northeastern	400	520		920
29	Ferris State	400	400		800
31	Wayne State	240	240		480
32	Minnesota	275	550		825
33	Mississippi	420	420		840
34	St. Louis	200	400		600
35	Missouri	300	320		620
36	Montana	200	400		600
37	Creighton	320	320		640
39	Rutgers	160	800		960
40	New Mexico	180	360	135	675
41	A & M Schwartz	245	441		686
42	St. Johns	400	239		639
43	SUNY Buffalo	200	360	200	760
44	Albany	200	400		600
46	North Carolina	160	320	160	640

TABLE 1. HOURS OF PRACTICE EXPERIENCE REQUIRED BY SCHOOL BACCALAUREATE DEGREE (CONTINUED)

CODE	SCHOOL	CL	EX	SEL	TOTAL
47	North Dakota	400	400		800
48	Ohio Northern	400	400		800
49	Ohio State	160	280		440
50	Cincinnati	160	320	160	640
51	Toledo	360	400	200	960
52	SW Oklahoma	212	424		636
53	Oklahoma	200	450		650
54	Oregon State	160	320		480
55	Duquesne	160	480		640
56	Philadelphia	160	320	160	640
57	Temple	160	320	160	640
58	Pittsburgh	224	360		584
59	Puerto Rico	216	252	72	540
60	Rhode Island	300	300		600
61	S.C. Medical	200	376		576
62	South Carolina	320	320		640
63	South Dakota	240	600		840
65	Texas Southern			550	550
66	Houston	250	750		1000
67	Texas	325	705		1030
68	Utah	100	200	100	400
69	VA Commonwealth	160	320	160	640
70	Washington	100	300		400
71	Washington State	320	640		960
72	West Virginia	160	320	160	640
73	Wisconsin	320	120		440
74	Wyoming	150	450		600
1989-90					
MEDIAN		220	388	160	640
AVERAGE		256	407	189	692
NUMBER OF REPORTS		(62)	(62)	(17)	(64)
1988-89					
AVERAGE		278	411	176	
NUMBER OF REPORTS		(63)	(65)	(17)	

(Cl = Clerkship, EX = Externship, SEL = Selected, TOT = Total experiential hours)

TABLE 2. HOURS OF PRACTICE EXPERIENCE REQUIRED BY SCHOOL ENTRY-LEVEL DOCTOR OF PHARMACY DEGREE (PHARM.D.1.)

CODE	SCHOOL	CL	EX	SEL	TOTAL.
3	Arizona	720	480	720	1920
5	California	720	96	324	1140
6	Pacific	528	528	528	1584
7	Southern California	1440	205		1645
10	Howard	1500	400	200	2100
11	Florida A & M	1250	750		2000
12	Southeastern	1280	640		1920
13	Florida			1360	1360
14	Mercer	1200	400		
15	Georgia	1120	320		1440
16	Idaho State	1280	160	320	1760
17	Illinois	760	560	560	1880
19	Purdue	1440	480		1920
22	Kansas	960	480		1440
23	Kentucky	1280	320		1600
26	Maryland	1850	480		2330
29	Ferris State	1800	400		2200
30	Michigan	1200	200	200	1600
32	Minnesota	1600	640		2240
34	St. Louis	1500	400	200	2100
35	Missouri	1280			1280
37	Creighton	640	320	640	1600
38	Nebraska	800	320	480	1600
39	Rutgers	1760	480		2240
45	Campbell	560	560		1120
46	North Carolina	1120	480	480	2080
47	North Dakota	2080	400		2480
56	Philadelphia	2560	160		2720
62	South Carolina	1600	320		1920
64	Tennessee	1120	320	320	1760
65	Texas Southern	1725	470	200	2395
67	Texas	2160	600		2760
69	VA Commonwealth	1440	320		1760
	1989-90				
	MEDIAN	1280	400	402	1880
	AVERAGE	1321	409	467	1863
	NUMBER OF REPORTS	(32)	(31)	(14)	(33)
	1988-89				
	AVERAGE	1347	405	384	
	NUMBER OF REPORTS	(33)	(32)	(14)	

(Cl = Clerkship, EX = Externship, SEL = Selected, TOT = Total experiential hours)

TABLE 3. HOURS OF PRACTICE EXPERIENCE REQUIRED BY SCHOOL POST-B.S. DOCTOR OF PHARMACY DEGREE (PHARM.D.2.)

CODE	SCHOOL	CL	EX	SEL	TOTAL
1	Auburn	1600			1600
6	Pacific	528	264	807	1599
7	Southern California	1440			1440
10	Howard	1500		200	1700
11	Florida A & M	2000			2000
12	Southeastern	1280			1280
15	Georgia	1440			1440
16	Idaho State	960		160	1120
19	Purdue	1280			1280
21	Iowa	1920			1920
23	Kentucky	1280			1280
25	Xavier	1600			1600
26	Maryland	1850			1850
27	Massachusetts	1800			1800
28	Northeastern	1600			1600
29	Ferris State	1600	400		2000
30	Michigan	1200	200	200	1600
31	Wayne State	1290			1290
32	Minnesota	1920			1920
33	Mississippi	1120			1120
39	Rutgers	1760			1760
42	St. Johns	2990			2990
43	SUNY Buffalo	1920			1920
44	Albany	1440			1440
46	North Carolina	1120		480	1600
47	North Dakota	2080			2080
49	Ohio State	2080			2080
50	Cincinnati	1344			1344
51	Toledo	1760			1760
55	Duquesne	2000			2000
56	Philadelphia	2400			2400
57	Temple	1280			1280
61	S.C. Medical	2000		576	2576
62	South Carolina	1600	320		1920
65	Texas Southern	1725		200	1925
67	Texas	2160			2160
68	Utah	2700			2700
69	VA Commonwealth	1280		480	1760
70	Washington	1440		400	1840
73	Wisconsin	320	120	1040	1480

TABLE 3. HOURS OF PRACTICE EXPERIENCE REQUIRED BY SCHOOL PHARM.D.2. (CONTINUED)

	CL	EX	SEL	TOTAL
1989-90				
MEDIAN	1600	264	440	1760
AVERAGE	1615	261	454	1761
NUMBER OF REPORTS	(40)	(5)	(10)	(40)
1988-89				
AVERAGE	1584	358	506	
NUMBER OF REPORTS	(38)	(5)	(11)	

(Cl = Clerkship, EX = Externship, SEL = Selected, TOT = Total experiential hours)

TABLE 4. HOURS OF PRACTICE EXPERIENCE

DEGREE AND EXPERIENCE TYPE	SCHOOLS REPORTING	LOW	HIGH	AVERAGE	MEDIAN
BACCALAUREATE DEGREE					
Clerkship	62	100	750	256	220
Externship	62	120	800	407	388
Selected From Either	17	72	550	189	160
Total	64	320	1500	692	640
ENTRY-LEVEL DOCTOR OF PHARMACY DEGREE (PHARM. D.1.)					
Clerkship	32	528	2560	1321	1280
Externship	31	96	750	409	400
Selected From Either	14	200	1360	467	402
Total	33	1120	2760	1863	1880
POST-B.S. DOCTOR OF PHARMACY DEGREE (PHARM. D.2.)					
Clerkship	40	320	2990	1615	1600
Externship	5	120	400	261	264
Selected From Either	10	160	1040	454	440
Total	40	1120	2990	1761	1760

TABLE 5. HOURS OF GENERAL EDUCATION COURSES REQUIRED AS PART OF PROFESSIONAL DEGREE PROGRAM

TYPE ORGANIZATION	SCHOOLS REPORTING	LOW	HIGH	AVERAGE
SEMESTER HOURS	53	15	68	29
QUARTER HOURS	18	4	90	39
TRIMESTER OR TRIQUARTER HOURS	2	NA	NA	NA

TABLE 6. NUMBERS OF SCHOOLS EXPERIENCING CHANGES TO PHYSICAL FACILITIES FROM ACADEMIC YEAR 1988-89 TO 1989-90

Type of Facility	Increase [No. (% of schools)]	Decrease [No. (% of schools)]	No Change [No. (% of schools)]
Classroom (n=73)	8 (11 percent)	2 (2.7 percent)	63 (86.3 percent)
Teaching Laboratory (n=73)	7 (9.6 percent)	6 (8.2 percent)	60 (82.2 percent)
Research Laboratory (n=73)	21 (28.8 percent)	0	52 (71.2 percent)
Administrative Facilities (n=73)	10 (13.7 percent)	0	63 (86.3 percent)
Instructional Support Facilities (n=72)	9 (12.5 percent)	2 (2.8 percent)	61 (84.7 percent)

TABLE 7. CLINICAL INSTRUCTION SITES USED

TYPE	SCHOOLS REPORTING	LOW	HIGH	AVERAGE
COMMUNITY PHARMACIES	70	2	240	51
HOSPITAL, OR OTHER SIMILAR INSTITUTION	73	4	78	28
OTHER SIGHTS	56	1	88	11